

November 2, 2011

Mr. Ronald Gee
County of Napa
Conservation, Development & Planning Department
1195 Third Street, Room 210
Napa, CA 94559

Subject: Response to California Dept. of Fish and Game letter on Clover Flat Resource Recovery Park-Use Permit Major Modification, Mitigated Negative Declaration, SCH #2011082050, Napa County.

This letter addresses the recommended native tree planting density and total number of trees proposed to be planted in the tree mitigation areas for the Clover Flat Resource Recovery Facility and also provides a response to other biological resource issues raised by the Calif. Dept. of Fish and Game (CDFG) in their review of the proposed project's MND.

In a letter dated September 16, 2011 representatives from the California Department of Fish and Game indicated they thought the applicant's proposed tree planting plan was **208** trees and considered this tree planting too low to replace the **870** trees and associated woodland wildlife habitat that would be lost due to construction of the Clover Flat project.

The CDFG comment letter is correct in that construction of the recovery facility will result in the loss of approximately 870 mostly native coast live oak, madrone, and tan oak and Douglas fir trees. The existing stand is considered to be significantly over-stocked with too many trees per acre that suppress each other while competing for available sunlight and limited available moisture and nutrients. According to Bruce Hagen ISA certified arborist and Calif. Registered Professional Forester (retired from Calif. Dept. of Forestry), who conducted the tree survey the shallow soils, aspect and rainfall at the site can sustainably support a stand of only about 100 healthy and mature trees per acre. A stand density of 100 trees per acre represents an average tree spacing of about 20 feet by 20 feet, or a crown diameter of only 10 feet before touching adjacent tree canopies.

The Fish and Game letter is incorrect on the total number of trees proposed to be planted (CDFG letter says 208 trees). The Tree Mitigation Plan recommended an initial planting of **270** trees and **80** understory shrubs (these are tree like shrubs such as buckeye, toyon, and elderberry), totaling **350** woody plants on the 2.1 acre tree mitigation site. The **208** tree figure cited in the Fish and Game letter represents the total number of surviving trees expected to be on site after 5 years of maintenance and monitoring, assuming a **60%** survival rate. In other words 208 trees represent the total number of healthy trees that would need to be growing on site after the 5-year

monitoring period to meet the expected Napa County permit conditions. In fact one interesting dilemma that might be faced is if the survival rate is greater than 60%, should the remaining trees in excess of the target tree population of 208 be thinned to achieve a more sustainable and healthy tree and shrub population. This decision, along with the decision on the need for additional tree plantings to fill in gaps, increase cover density, add age, structural and species diversity, etc. should be made after the end of the five year maintenance and monitoring period.

Other issue brought up in the Dept. of Fish and Game letter was the request for the completion of nesting bird and pallid bat surveys of the project area and immediately surrounding area by a qualified biologist prior to tree removal, scheduling the work to avoid sensitive periods, protecting the occupied trees by establishing buffers around them, or providing other forms of mitigation. These can be made conditions of project approval.

The issue of whether the project is located near enough to an un-named seasonal drainage to require a Section 1600 Lake and Streambed Alteration Agreement (LSAA) was also addressed in the DFG letter. As noted on page 3 of the July 14, 2010 Questa Plant, Wildlife, and Tree Survey Reports for the project, the drainage way does not contain a readily identifiable riparian corridor, does not have a defined creek bank and does not exert an influence on the oak woodland character of the above lying project area. The 75 foot distance between the edge of the project disturbance area and the creek centerline appears to represent a suitable buffer or setback in this setting, but the drainage should be protected by the installation of construction fencing, during the tree removal, grading and construction. It does not appear to us that the project will need to obtain a LSAA, but perhaps a representative of the applicant should visit the site with a Fish and Game representative prior to site disturbance to verify that no LSAA is required.

Should you have any questions on this letter and response to the Dept. of Fish and Game comments, please do not hesitate to contact me at 510-236-6114x206

Sincerely,

A handwritten signature in black ink, appearing to read "Jeffrey H. Peters". The signature is fluid and cursive, with the first name "Jeffrey" being more prominent.

Jeffrey H. Peters
Sr. Environmental Scientist

Ref: 1000031 DFG com ltr